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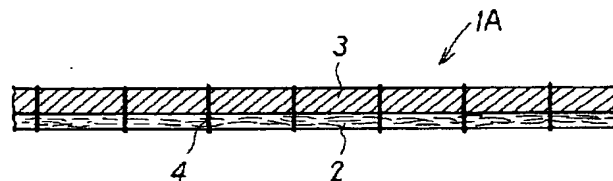
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(54) 【発明の名称】 不織布製乾式モップ用拭布

(57) 【要約】

【目的】 除塵能力を高めた乾式モップ用の拭布を得る。

【構成】 直径1～9 μ mの繊維からなる不織布製の払拭シート2と、拭布として必要な強度及び厚さを備えた基布3とを積層し、両者を間隔をおいた結合部4により一体に結合する。



【特許請求の範囲】

【請求項 1】直径 1～9 μm の繊維からなる不織布製の払拭シートと、拭布として必要な強度及び厚さを備えた基布とを積層し、両者を一体に結合してなることを特徴とする不織布製乾式モップ用拭布。

【請求項 2】払拭シートと基布とが、所要の間隔をおいて位置する結合部において互いに結合されていることを特徴とする請求項 1 に記載の不織布製乾式モップ用拭布。

【請求項 3】払拭シートと基布との間に、直径 10～20 μm の繊維からなる弾性に富んだ不織布製の補助シートを介在させたことを特徴とする請求項 1 又は 2 に記載の不織布製乾式モップ用拭布。

【請求項 4】補助シートが、払拭シートと共に上記結合部において基布に結合されていることを特徴とする請求項 3 に記載の不織布製乾式モップ用拭布。

【請求項 5】払拭シート及び補助シートを構成する不織布が、親油性繊維と親水性繊維との混合物からなることを特徴とする請求項 1 乃至 4 のいずれかに記載の不織布製乾式モップ用拭布。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は、モップに取り付けて使用する不織布製の乾式モップ用拭布に関するものであり、更に詳しくは、除塵能力の勝れた不織布製の拭布に関するものである。

【0002】

【従来の技術】従来より一般に、家具や床等を清掃するのにモップが使用されている。かかるモップには、拭布を水に濡らして使用する水拭きタイプのものや、拭布に油性の着塵剤を含浸させた化学モップなどがあるが、前者の場合は、拭布を逐一水に浸したり絞ったりしなければならないために作業が面倒で、拭布の乾きも悪いため非衛生的であるなどの欠点があり、後者の場合は、着塵剤の油の付着で壁や床が汚れ易いという問題がある。

【0003】このため、水や着塵剤等を使用しない乾式のモップを使用するのが望ましく、例えばティッシュペーパーのような紙やその他の不織布からなる拭布をモップに装着して使用する乾式モップの例もある。ところが、このような乾式モップに使用されている従来の拭布は、除塵能力が劣るために除塵効率が非常に悪く、細かい塵埃まで確実に除去することは困難であった。しかも、拭布自体が薄いため清掃時の使用感も悪かった。

【0004】

【発明が解決しようとする課題】本発明の主たる課題は、除塵能力を高めた乾式モップ用の拭布を提供することにある。本発明の他の課題は、弾力性に富んでいて使用感の良い、除塵能力を高めた乾式モップ用の拭布を提供することにある。

【0005】

【課題を解決するための手段】上記課題を解決するため、本発明によれば、直径が 1～9 μm の繊維からなる不織布製の払拭シートと、拭布として必要な強度及び厚さを備えた基布とを積層し、両者を一体に結合してなる不織布製乾式モップ用拭布が提供される。上記払拭シートと基布とは、所要の間隔をおいて位置する結合部において互いに結合されている。本発明の他の例によれば、上記払拭シートと基布との間に、直径 10～20 μm の繊維からなる弾性に富んだ不織布製の補助シートを介在させた不織布製乾式モップ用拭布が提供される。上記補助シートは、払拭シートと基布とを結合する結合部の位置でこれらの払拭シート及び基布に結合されている。本発明の好ましい例によれば、上記払拭シート及び補助シートを構成する不織布が、親油性繊維と親水性繊維との混合物で構成される。

【0006】

【作用】上記拭布は、モップのヘッドに装着して家具や床等の清掃に使用するが、表面の払拭シートが、直径 1～9 μm という極細の繊維により形成されているため除塵能力が非常に高く、着塵剤を含浸しなくても微細な塵埃まで確実に除去することができるばかりでなく、ダニや花粉、細菌類の一部等をも除去することができる。また、極細の繊維からなる上記払拭シートは、それ自体の強度は小さいが、拭布として必要な強度及び厚さを備えた基布と積層されているため、該基布に補強されて必要な強度を保つことができ、それと同時に、弾力性も付与されて使用感が向上する。

【0007】更に、上記払拭シートと基布との間に、直径 10～20 μm の繊維からなる弾性に富んだ不織布製の補助シートを介在させることにより、拭布の弾力性を一層向上させて清掃時の使用感をより高めることができるばかりでなく、同様の弾力性及び使用感を持った拭布を、高価な払拭シートのみを用いて構成した場合よりも安価に形成することができる。

【0008】汚れた拭布は水洗いして繰り返し使用する。そして、繰り返し使用している間に強度の弱い払拭シートが次第に破れていっても、間隔をおいた結合部によって基布に結合されているため、破れた部分が脱落することなく、房状に垂れ下がった状態となる。払拭シートの下に補助シートが積層されている場合には、この補助シートも同様に破れて房状に垂れ下がる。この結果、拭布の表面積が増大すると共に、見掛けの厚みも増大し、却って除塵能力及びクッション性が向上することになる。この状態は払拭シート及び補助シートが擦り切れて房状部分が消失するまで継続する。

【0009】

【実施例】以下、本発明の実施例を図面に基づいて詳細に説明するに、図 1 は乾式モップに使用される本発明の拭布の第 1 実施例を示すもので、この拭布 1A は、直径が 1～9 μm の極細繊維からなる不織布製の払拭シート

2と、拭布として必要な強度及び厚さを備えた基布3とを積層し、それらを結合部4において一体に結合することにより構成されている。

【0010】上記払拭シート2を構成する不織布は、ポリプロピレン、ポリエステル、アクリルのような親油性の繊維であっても、レーヨンやナイロン（商標名）のような親水性の繊維であっても、親油性繊維と親水性繊維とを適当な比率で混合したものであっても良く、親油性繊維と親水性繊維とを混合したものを使用すると、水性の汚れでも油性の汚れでも確実に拭き取ることができ

る。また、上記基布3には、基本的にはどのような素材のものを用いても良いが、好ましくは吸水性のない合成繊維からなる拭布又は不織布を用いることであり、合成樹脂製のシートを用いることもできる。

【0011】上記払拭シート2と基布3との結合は、ヒートシール、接着剤による接着、糸による縫着等の適宜手段により行うことができ、その場合、払拭シート2と基布3とを全面的に結合一体化しても良いが、図示したように、所要の間隔をおいて位置する結合部4によって部分的に結合することが望ましい。この場合の結合部4

の配列パターンは、並列状、格子状、点状など、任意である。

【0012】かくして払拭シート2と基布3とを積層して一体に結合することにより、極細の繊維からなるが故に除塵能力は優れていても強度の弱い払拭シート2が、基布3により補強されて拭布としての必要な強度が保持され、それと同時に、基布3により弾力性も付与されて使用感が向上する。

【0013】また、上記払拭シート2と基布3とを間隔をおいた結合部4で結合することにより、繰り返し使用している間に強度の弱い払拭シート2が破れた場合でも、図2に示すように、破れた部分が脱落することなく、房状に垂れ下がった状態となり、これが拭布1Aの表面積を増大させると共に、見掛けの厚みも増大させ、却って除塵能力及びクッション性を向上させるという効果をもたらす。

【0014】上記構成を有する拭布1Aは、モップのヘッドに装着して家具や床等の清掃に使用するが、表面の払拭シート2が、直径1～9μmという極細の繊維により形成されているため除塵能力に勝れ、着塵剤を含浸しなくても微細な塵埃まで確実に除去することができるばかりでなく、ダニや花粉、細菌類の一部等をも除去することができる。また、極細の繊維からなる上記払拭シート2は、除塵能力には優れているものの強度が弱い

が、基布3との積層により補強されて強度が高められており、しかも、適度の厚み及び弾力性が付与されて使用感も良い。

【0015】汚れた拭布1Aは水洗いして繰り返し使用する。そして、繰り返し使用している間に強度の弱い払拭シート2が次第に破れていっても、該払拭シート2が

間隔をおいた結合部4によって基布3に結合されているため、破れた部分が脱落することなく、図2の如く房状に垂れ下がった状態となり、これが拭布1Aの表面積を増大させると共に、見掛けの厚みを増大させ、この結果、却って拭布の除塵能力及びクッション性が向上することになる。この状態は払拭シート2が擦り切れて房状部分が消失するまで継続する。

【0016】図3は本発明の拭布の第2実施例を示すもので、この拭布1Bは、上記第1実施例のものと同様の素材で構成された払拭シート2と基布3との間に、直径10～20μmの繊維からなる弾性に富んだ不織布製の補助シート5を介在させ、これらの払拭シート2と補助シート5及び基布3を、間隔をおいた結合部4によって一体に結合したものである。上記補助シート5を構成する不織布は、ポリプロピレン、ポリエステル、アクリルのような親油性の繊維であっても、レーヨンやナイロン（商標名）のような親水性の繊維であっても、親油性繊維と親水性繊維とを適当な比率で混合したものであっても良い。

【0017】上記補助シート5は、拭布1Bの弾力性を向上させて清掃時の使用感をより高めると同時に、除塵能力をも高めるものであるが、極細繊維からなる払拭シート2に比べて安価であるため、拭布1Bと同様の弾力性及び除塵能力を持った拭布を高価な払拭シート2のみを用いて構成する場合に比べ、より安価に形成することができる。また、図4に示すように、繰り返し使用することによって払拭シート2及び補助シート5が破れた場合でも、それらが房状に垂れ下がることにより、拭布1Bの表面積が増大すると共に、見掛けの厚みも増大し、除塵能力及びクッション性が向上する。

【0018】

【発明の効果】このように本発明によれば、拭布の表面に直径1～9μmの極細繊維からなる払拭シートを配設したので、除塵能力に勝れ、着塵剤を含浸しなくても微細な塵埃まで確実に除去することができる。また、除塵能力には優れているものの強度が弱い上記払拭シートを、基布で補強するようにしているため、拭布全体としての十分な強度が保持されると同時に厚みも増大し、弾力性も増して使用感が良い。更に、強度の弱い上記払拭シートと基布とを間隔をおいた結合部で結合することにより、繰り返しの使用で払拭シートが破れた場合でも、破れた部分が房状に垂れ下がった状態となるため、これが拭布の表面積を増大させると共に、見掛けの厚みを増大させ、却って拭布の除塵能力及びクッション性が向上するという利点がある。

【図面の簡単な説明】

【図1】本発明に係る拭布の第1実施例を示す部分断面図である。

【図2】図1の拭布の使用時の一態様を示す要部断面図である。

【図 3】本発明に係る拭布の第 2 実施例を示す部分断面図である。

* 【符号の説明】

1 A, 1 B 拭布

2 払拭シート

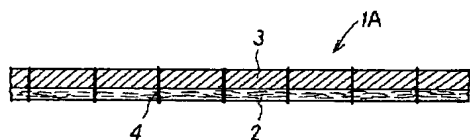
3 基布

4 結合部

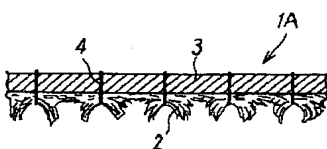
【図 4】図 2 の拭布の使用時の一態様を示す要部断面図である。

* 5 補助シート

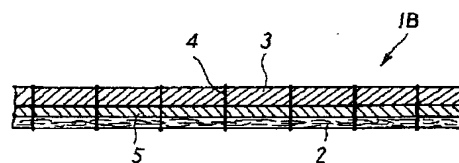
【図 1】



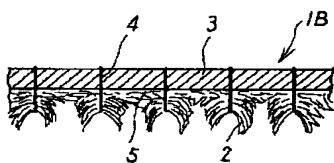
【図 2】



【図 3】



【図 4】



PATENT ABSTRACTS OF JAPAN

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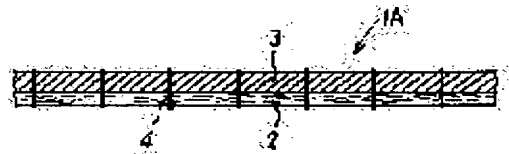
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(54) WIPING CLOTH FOR NONWOVEN FABRIC DRY MOP

(57)Abstract:

PURPOSE: To improve dust removing capacity and cushion performance of wiping cloth by layering base cloth and a nonwoven fabric wiping-out sheet composed of fiber having a specific diameter, and integrally joining both together.

CONSTITUTION: This wiping cloth 1A is constituted by integrally joining both together by joining parts 4 by layering a nonwoven fabric wiping-out sheet 2 composed of very fine fiber having a diameter of 1 to 9 μ m and base cloth 3 having necessary strength and thickness as wiping cloth. Lipophilic fiber such as polypropylene, polyester and acrylic, hydrophilic fiber such as rayon and nylon or fiber by mixing the lipophilic fiber and the hydrophilic fiber together in the proper ratio, is used as nonwoven fabric. The wiping-out sheet 2 and the base cloth 3 are joined together by a proper means such as a heat seal, an adhesive and sewing by thread.



[JP,08-154881,A]

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CLAIMS

[Claim(s)]

[Claim 1]

A wiping cloth for the product dry type mops made of a nonwoven fabric which laminates a base fabric characterized by comprising the following, combines both with one, and is characterized by things. A wiping sheet made of a nonwoven fabric which consists of textiles 1-9 micrometers in diameter. Intensity required as a wiping cloth, and thickness.

[Claim 2]

The wiping cloth for the product dry type mops made of a nonwoven fabric according to claim 1, wherein a wiping sheet and base fabric of each other are combined in a bond part which sets a necessary interval and is located:

[Claim 3]

The wiping cloth for the product dry type mops made of a nonwoven fabric according to claim 1 or 2 making an auxiliary seat made of a nonwoven fabric which was rich in elasticity which consists of textiles 10-20 micrometers in diameter intervene between a wiping sheet and a base fabric.

[Claim 4]

The wiping cloth for the product dry type mops made of a nonwoven fabric according to claim 3, wherein an auxiliary seat is combined with a base fabric in the above-mentioned bond part with a wiping sheet.

[Claim 5]

The wiping cloth for the product dry type mops made of a nonwoven fabric according to any one of claims 1 to 4, wherein a nonwoven fabric which constitutes a wiping sheet and an auxiliary seat consists of a mixture of lipophilic fibers and a hydrophilic fiber.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application]

This invention relates to the wiping cloth for dry type mops made of a nonwoven fabric used attaching to a mop.

It is related with the wiping cloth excellent in dust-removing capability made of a nonwoven fabric in detail.

[0002]

[Description of the Prior Art]

Generally the mop is conventionally used for cleaning furniture, a floor, etc. Although the thing of the damping-with-a-damp-towel type which uses a wiping cloth for water wetting it, the chemicals mop which impregnated the wiping cloth with the oily dust-attracting agent, etc. are one of these

mops, Since in the case of the former work is troublesome in order to have to dip a wiping cloth in water one by one or to have to extract it, and dryness of a wiping cloth is also bad, there is a fault, such as it being insanitary and being, and when it is the latter, there is a problem that a wall and a floor become dirty easily from adhesion of the oil of a dust-attracting agent.

[0003]

For this reason, there is also an example of the dry type mop with which using the dry-type mop which uses neither water nor a dust-attracting agent uses for a mop the wiping cloth which consists of paper like a tissue paper or other nonwoven fabrics desirably equipping with it. However, since dust-removing capability was inferior, the conventional wiping cloth currently used for such a dry type mop had dramatically bad dust-removing efficiency, and it was difficult to remove even fine dust certainly. And since the wiping cloth itself was thin, the using feeling at the time of cleaning was also bad.

[0004]

[Problem(s) to be Solved by the Invention]

There is main SUBJECT of this invention in providing the wiping cloth for dry type mops which heightened dust-removing capability. There is other SUBJECT of this invention in providing the wiping cloth for dry type mops which is rich in elasticity and heightened dust-removing capability with a sufficient using feeling.

[0005]

[Means for Solving the Problem]

In order to solve an aforementioned problem, according to this invention, a wiping sheet made of a nonwoven fabric which consists of textiles 1-9 micrometers in diameter, and a base fabric provided with intensity and thickness required as a wiping cloth are laminated, and a wiping cloth for the product dry type mops made of a nonwoven fabric which combines both with one is provided. In a bond part which sets a necessary interval and is located, the above-mentioned wiping sheet and base fabric of each other are combined. According to other examples of this invention, a wiping cloth for the product dry type mops made of a nonwoven fabric which made an auxiliary seat made of a nonwoven fabric which was rich in elasticity which consists of textiles 10-20 micrometers in diameter intervene between the above-mentioned wiping sheet and a base fabric is provided. The above-mentioned auxiliary seat is combined with these wiping sheets and base fabrics in a position of a bond part which combines a wiping sheet and a base fabric. According to the desirable example of this invention, a nonwoven fabric which constitutes the above-mentioned wiping sheet and an auxiliary seat comprises a mixture of lipophilic fibers and a hydrophilic fiber.

[0006]

[Function]

Although the head of a mop is equipped with the above-mentioned wiping cloth and it is used for cleaning of furniture, a floor, etc., Since the surface wiping sheet is formed of the super-thin textiles of 1-9 micrometers in diameter, even if dust-removing capability is dramatically high and a dust-attracting agent is not impregnated with it, even detailed dust is not only certainly removable, but some of ticks and pollen and bacteria are removable. Although the intensity of itself is small, since it laminates with the base fabric provided with intensity and thickness required as a wiping cloth, the above-mentioned wiping sheet which consists of super-thin textiles is reinforced by this base fabric, and can maintain required intensity, elasticity is also given and, simultaneously with it, its using feeling improves.

[0007]

By making the auxiliary seat made of a nonwoven fabric which was rich in the elasticity which consists of textiles 10-20 micrometers in diameter intervene between the above-mentioned wiping sheet and a base fabric, The elasticity of a wiping cloth can be raised further and it can form more cheaply than the case where it not only can raise the using feeling at the time of cleaning more, but a wiping cloth with the same elasticity and using feeling is constituted only using an expensive

wiping sheet.

[0008]

Repeated use of the unclean wiping cloth is washed in cold water and carried out. And it will be in the state where it hung down to tufted, without the torn portion falling out, since it is combined with the base fabric by the bond part which set the interval even if the wiping sheet with weak intensity is gradually torn while carrying out repeated use. When the auxiliary seat is laminated under the wiping sheet, this auxiliary seat is torn similarly and hangs down to tufted. As a result, the surface area of a wiping cloth will increase, and apparent thickness will also increase and dust-removing capability and cushioning properties will improve on the contrary. This state is continued until a wiping sheet and an auxiliary seat wear out and a tufted portion disappears.

[0009]

[Example]

The 1st example of the wiping cloth of this invention with which drawing 1 is used by the dry type mop explaining in detail based on a drawing in the example of this invention is shown hereafter, and this wiping cloth 1A, The wiping sheet 2 made of a nonwoven fabric which consists of super-thin textiles 1-9 micrometers in diameter, and the base fabric 3 provided with intensity and thickness required as a wiping cloth are laminated, and it is constituted by combining them with one in the bond part 4.

[0010]

Even if the nonwoven fabrics which constitute the above-mentioned wiping sheet 2 are polypropylene, polyester, and oleophilic textiles like an acrylic, It may be textiles of hydrophilic nature like rayon or nylon (brand name), or lipophilic fibers and a hydrophilic fiber may be mixed by a suitable ratio, and if what mixed lipophilic fibers and a hydrophilic fiber is used, water dirt can also wipe off oily dirt certainly. Although the thing of what kind of raw material may be fundamentally used for the above-mentioned base fabric 3, it is using the wiping cloth or nonwoven fabric which consists of a synthetic fiber which does not have absorptivity preferably, and the sheet made of a synthetic resin can also be used.

[0011]

Although heat sealing, adhesion by adhesives, attaching by sewing by thread, etc. can perform suitably combination with the above-mentioned wiping sheet 2 and the base fabric 3 by a means and the joint unification of the wiping sheet 2 and the base fabric 3 may be extensively carried out in that case, as illustrated, It is desirable to combine a necessary interval selectively by the bond part 4 set and located. As for the arrangement pattern of the bond part 4 in this case, the letter of parallel, the shape of a lattice, punctiform, etc. are arbitrary.

[0012]

By laminating the wiping sheet 2 and the base fabric 3 in this way, and combining with one, Although it consists of super-thin textiles therefore, even if excelled, the wiping sheet 2 with weak intensity is reinforced by the base fabric 3, the required intensity as a wiping cloth is held, elasticity is also given by the base fabric 3 and, simultaneously with it, the using feeling of dust-removing capability improves.

[0013]

By combining the above-mentioned wiping sheet 2 and the base fabric 3 by the bond part 4 which set the interval, Will be in the state where it hung down to tufted, and this increases the surface area of the wiping cloth 1A, without the torn portion falling out, as shown in drawing 2 even when the wiping sheet 2 with weak intensity is torn while carrying out repeated use, and. The effect of also increasing apparent thickness and raising dust-removing capability and cushioning properties on the contrary is brought about.

[0014]

Although the head of a mop is equipped with the wiping cloth 1A which has the above-mentioned composition and it is used for cleaning of furniture, a floor, etc., Since the surface wiping sheet 2 is formed of the super-thin textiles of 1-9 micrometers in diameter, even if it is excellent in

dust-removing capability and a dust-attracting agent is not impregnated with it, even detailed dust is not only certainly removable, but some of ticks and pollen and bacteria are removable. Although the above-mentioned wiping sheet 2 which consists of super-thin textiles has the weak intensity of a thing excellent in dust-removing capability, it is reinforced by lamination with the base fabric 3, and intensity is raised.

And moderate thickness and elasticity are given and a using feeling is also good.

[0015]

Repeated use of the unclean wiping cloth 1A is washed in cold water and carried out. And since this wiping sheet 2 is combined with the base fabric 3 by the bond part 4 which set the interval even if the wiping sheet 2 with weak intensity is gradually torn while carrying out repeated use, Without the torn portion falling out, will be in the state where it hung down to tufted like drawing 2, and this will increase the surface area of the wiping cloth 1A, and apparent thickness will be increased and, as a result, the dust-removing capability and cushioning properties of a wiping cloth will improve on the contrary. This state is continued until the wiping sheet 2 wears out and a tufted portion disappears.

[0016]

Drawing 3 shows the 2nd example of the wiping cloth of this invention, and this wiping cloth 1B, Between the wiping sheet 2 and the base fabric 3 which comprised the same raw material as the thing of the 1st example of the above, The auxiliary seat 5 made of a nonwoven fabric which was rich in the elasticity which consists of textiles 10-20 micrometers in diameter is made to intervene, and these wiping sheets 2 and auxiliary seats 5, and the base fabric 3 are combined with one by the bond part 4 which set the interval. The nonwoven fabrics which constitute the above-mentioned auxiliary seat 5 may be polypropylene, polyester, and oleophilic textiles like an acrylic, may be sex textiles of hydrophilic nature like rayon or nylon (brand name), or may mix lipophilic fibers and a hydrophilic fiber by a suitable ratio.

[0017]

Also heighten dust-removing capability at the same time the above-mentioned auxiliary seat 5 raises the elasticity of the wiping cloth 1B and it raises the using feeling at the time of cleaning more, but. Since it is cheap compared with the wiping sheet 2 which consists of super-thin textiles, compared with the case where a wiping cloth with the same elasticity as the wiping cloth 1B and dust-removing capability is constituted only using the expensive wiping sheet 2, it can form more cheaply. When the wiping sheet 2 and the auxiliary seat 5 are torn by carrying out repeated use, and they hang down to tufted, the surface area of the wiping cloth 1B increases [as shown in drawing 4,], and apparent thickness also increases and dust-removing capability and cushioning properties improve.

[0018]

[Effect of the Invention]

Thus, in this invention, the wiping sheet which consists of super-thin textiles 1-9 micrometers in diameter on the surface of a wiping cloth was allocated.

Therefore, it excels in dust-removing capability, and even detailed dust is certainly removable even if a dust-attracting agent is not impregnated.

Since he is trying to reinforce the above-mentioned wiping sheet with weak intensity of a thing excellent in dust-removing capability with a base fabric, thickness also increases at the same time sufficient intensity as the whole wiping cloth is held, elasticity also increases, and a using feeling is good. Since the torn portion will be in the state where it hung down to tufted even when a wiping sheet loses repeated use by combining the strong weak above-mentioned wiping sheet and base fabric by the bond part which set the interval, This increases the surface area of a wiping cloth, and apparent thickness is increased and there is an advantage that the dust-removing capability and cushioning properties of a wiping cloth improve on the contrary.

TECHNICAL FIELD

[Industrial Application]

This invention relates to the wiping cloth for dry type mops made of a nonwoven fabric used attaching to a mop.

It is related with the wiping cloth excellent in dust-removing capability made of a nonwoven fabric in detail.

PRIOR ART

[Description of the Prior Art]

Generally the mop is conventionally used for cleaning furniture, a floor, etc. Although the thing of the damping-with-a-damp-towel type which uses a wiping cloth for water wetting it, the chemicals mop which impregnated the wiping cloth with the oily dust-attracting agent, etc. are one of these mops, Since in the case of the former work is troublesome in order to have to dip a wiping cloth in water one by one or to have to extract it, and dryness of a wiping cloth is also bad, there is a fault, such as it being insanitary and being, and when it is the latter, there is a problem that a wall and a floor become dirty easily from adhesion of the oil of a dust-attracting agent.

[0003]

For this reason, there is also an example of the dry type mop with which using the dry-type mop which uses neither water nor a dust-attracting agent uses for a mop the wiping cloth which consists of paper like a tissue paper or other nonwoven fabrics desirably equipping with it. However, since dust-removing capability was inferior, the conventional wiping cloth currently used for such a dry type mop had dramatically bad dust-removing efficiency, and it was difficult to remove even fine dust certainly. And since the wiping cloth itself was thin, the using feeling at the time of cleaning was also bad.

EFFECT OF THE INVENTION

[Effect of the Invention]

Thus, in this invention, the wiping sheet which consists of super-thin textiles 1-9 micrometers in diameter on the surface of a-wiping cloth was allocated.

Therefore, it excels in dust-removing capability, and even detailed dust is certainly removable even if a dust-attracting agent is not impregnated.

Since he is trying to reinforce the above-mentioned wiping sheet with weak intensity of a thing excellent in dust-removing capability with a base fabric, thickness also increases at the same time sufficient intensity as the whole wiping cloth is held, elasticity also increases, and a using feeling is good. Since the torn portion will be in the state where it hung down to tufted even when a wiping sheet loses repeated use by combining the strong weak above-mentioned wiping sheet and base fabric by the bond part which set the interval, This increases the surface area of a wiping cloth, and apparent thickness is increased and there is an advantage that the dust-removing capability and cushioning properties of a wiping cloth improve on the contrary.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]

There is main SUBJECT of this invention in providing the wiping cloth for dry type mops which heightened dust-removing capability. There is other SUBJECT of this invention in providing the wiping cloth for dry type mops which is rich in elasticity and heightened dust-removing capability

with a sufficient using feeling.
[0005]

MEANS

[Means for Solving the Problem]

In order to solve an aforementioned problem, according to this invention, a wiping sheet made of a nonwoven fabric which consists of textiles 1-9 micrometers in diameter, and a base fabric provided with intensity and thickness required as a wiping cloth are laminated, and a wiping cloth for the product dry type mops made of a nonwoven fabric which combines both with one is provided. In a bond part which sets a necessary interval and is located, the above-mentioned wiping sheet and base fabric of each other are combined. According to other examples of this invention, a wiping cloth for the product dry type mops made of a nonwoven fabric which made an auxiliary seat made of a nonwoven fabric which was rich in elasticity which consists of textiles 10-20 micrometers in diameter intervene between the above-mentioned wiping sheet and a base fabric is provided. The above-mentioned auxiliary seat is combined with these wiping sheets and base fabrics in a position of a bond part which combines a wiping sheet and a base fabric. According to the desirable example of this invention, a nonwoven fabric which constitutes the above-mentioned wiping sheet and an auxiliary seat comprises a mixture of lipophilic fibers and a hydrophilic fiber.

OPERATION

[Function]

Although the head of a mop is equipped with the above-mentioned wiping cloth and it is used for cleaning of furniture, a floor, etc., Since the surface wiping sheet is formed of the super-thin textiles of 1-9 micrometers in diameter, even if dust-removing capability is dramatically high and a dust-attracting agent is not impregnated with it, even detailed dust is not only certainly removable, but some of ticks and pollen and bacteria are removable. Although the intensity of itself is small, since it laminates with the base fabric provided with intensity and thickness required as a wiping cloth, the above-mentioned wiping sheet which consists of super-thin textiles is reinforced by this base fabric, and can maintain required intensity, elasticity is also given and, simultaneously with it, its using feeling improves.

[0007]

By making the auxiliary seat made of a nonwoven fabric which was rich in the elasticity which consists of textiles 10-20 micrometers in diameter intervene between the above-mentioned wiping sheet and a base fabric, The elasticity of a wiping cloth can be raised further and it can form more cheaply than the case where it not only can raise the using feeling at the time of cleaning more, but a wiping cloth with the same elasticity and using feeling is constituted only using an expensive wiping sheet.

[0008]

Repeated use of the unclean wiping cloth is washed in cold water and carried out. And it will be in the state where it hung down to tufted, without the torn portion falling out, since it is combined with the base fabric by the bond part which set the interval even if the wiping sheet with weak intensity is gradually torn while carrying out repeated use. When the auxiliary seat is laminated under the wiping sheet, this auxiliary seat is torn similarly and hangs down to tufted. As a result, the surface area of a wiping cloth will increase, and apparent thickness will also increase and dust-removing capability and cushioning properties will improve on the contrary. This state is continued until a wiping sheet and an auxiliary seat wear out and a tufted portion disappears.

EXAMPLE

[Example]

The 1st example of the wiping cloth of this invention with which drawing 1 is used by the dry type mop explaining in detail based on a drawing in the example of this invention is shown hereafter, and this wiping cloth 1A, The wiping sheet 2 made of a nonwoven fabric which consists of super-thin textiles 1-9 micrometers in diameter, and the base fabric 3 provided with intensity and thickness required as a wiping cloth are laminated, and it is constituted by combining them with one in the bond part 4.

[0010]

Even if the nonwoven fabrics which constitute the above-mentioned wiping sheet 2 are polypropylene, polyester, and oleophilic textiles like an acrylic, It may be textiles of hydrophilic nature like rayon or nylon (brand name), or lipophilic fibers and a hydrophilic fiber may be mixed by a suitable ratio, and if what mixed lipophilic fibers and a hydrophilic fiber is used, water dirt can also wipe off oily dirt certainly. Although the thing of what kind of raw material may be fundamentally used for the above-mentioned base fabric 3, it is using the wiping cloth or nonwoven fabric which consists of a synthetic fiber which does not have absorptivity preferably, and the sheet made of a synthetic resin can also be used.

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[0014]

Although the head of a mop is equipped with the wiping cloth 1A which has the above-mentioned composition and it is used for cleaning of furniture, a floor, etc., Since the surface wiping sheet 2 is formed of the super-thin textiles of 1-9 micrometers in diameter, even if it is excellent in dust-removing capability and a dust-attracting agent is not impregnated with it, even detailed dust is not only certainly removable, but some of ticks and pollen and bacteria are removable. Although the above-mentioned wiping sheet 2 which consists of super-thin textiles has the weak intensity of a thing excellent in dust-removing capability, it is reinforced by lamination with the base fabric 3, and intensity is raised.

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Without the torn portion falling out, will be in the state where it hung down to tufted like drawing 2, and this will increase the surface area of the wiping cloth 1A, and apparent thickness will be increased and, as a result, the dust-removing capability and cushioning properties of a wiping cloth will improve on the contrary. This state is continued until the wiping sheet 2 wears out and a tufted portion disappears.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]

It is a fragmentary sectional view showing the 1st example of the wiping cloth concerning this invention.

[Drawing 2]

It is an important section sectional view showing one mode at the time of use of the wiping cloth of drawing 1.

[Drawing 3]

It is a fragmentary sectional view showing the 2nd example of the wiping cloth concerning this invention.

[Drawing 4]

It is an important section sectional view showing one mode at the time of use of the wiping cloth of drawing 2.

[Description of Notations]

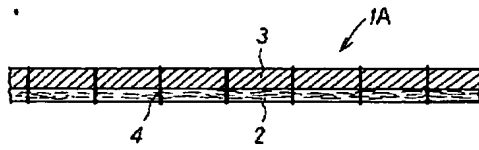
1A and 1B Wiping cloth 2 wiping sheet

3 Base fabric 4 bond part

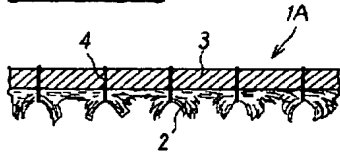
5 Auxiliary seat

DRAWINGS

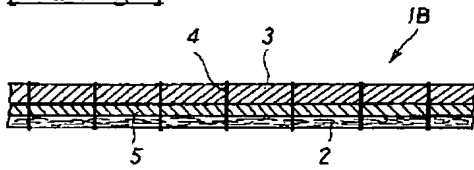
[Drawing 1]



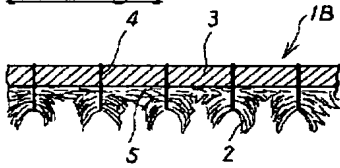
[Drawing 2]



[Drawing 3]



[Drawing 4]



[Translation done.]